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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/116,138

07/15/1998

JOHN MARK ANTHONY

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12/16/2003

TEXAS INSTRUMENTS INCORPORATED

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EXAMINER

COLEMAN, WILLIAM D

ART UNIT

PAPER NUMBER

2823

DATE MAILED: 12/16/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/116,138

Applicant(s)

ANTHONY ET AL.

Examiner

W. David Coleman

Art Unit

2823

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 August 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30, 36-40 and 46-80 is/are pending in the application.
- 4a) Of the above claim(s) 2-40 and 46-80 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 is/are rejected.
- 7) ☒ Claim(s) 26, 27 and 30 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

Response to Arguments

2. Applicant's arguments filed August 20, 2002 have been fully considered but they are not persuasive.

3. Applicants contend that Hsieh, U.S. Patent 4,432,035 herein known as Hsieh fails to anticipate claim 1 because claim 1 is limited to method of fabricating a field-effect device.

4. In response to Applicants contention that Hsieh fails to teach each and every limitation of claim 1, the Examiner objects to Applicants Oath & Declaration because an inventor swears that he/she is the first to invent or make an improvement, however in light of the arguments, it is well known that William Shockley, Walter Brattain and John Bardeen built the first working transistor and they are not listed on the Oath and Declaration. It appears that Applicants arguments are sincere, however, there is no possible way that Applicants could make a claim for an invention and argue that Hsieh's invention is not a field effect device having a gate electrode. The Examiner provides Applicants with supplemental citations (*Device Electronics For Integrated Circuits, 2nd Ed., Muller et al., John Wiley & Sons, © 1986* "The Biographical Dictionary of Scientists, 3rd edition, vol. 1, Oxford University Press, NY, © 1984/1985 for scientist and engineers, pp. 120-121) to show that it is well known that a MOS device is a field effect device having a gate electrode, and that Shockley, Brattain and Bardeen were the first to disclose the field effect device.

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5. Applicants contend that the MOS system of Hsieh does not disclose forming a conductive gate overlying the metal silicate dielectric layer.

6. In response to Applicants contention that Hsieh fails to disclose forming a conductive gate overlying the metal silicate dielectric layer, please see FIG. 2 where a conductive gate 12' is formed overlying the metal silicate dielectric layer. Applicants arguments reveal that they could not possibly possess the claimed invention due to the lack of understanding of Silicon Technology and the MOS system. These arguments are not expected from inventors experienced with an understanding of integrated circuits incorporating silicon technology.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Hsieh et al., U.S. Patent 4,432,035.

9. Hsieh discloses a semiconductor process as claimed. See **FIGS. 1-8**, where Hsieh substantially teaches the claimed invention.

10. Hsieh teaches a method of fabricating a field-effect device on an integrated circuit, comprising the steps of:

providing a single-crystal silicon substrate;

forming a metal silicate dielectric layer 12' on the substrate 10; and

forming a conductive gate 14 overlying the metal silicate dielectric layer.

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Objection

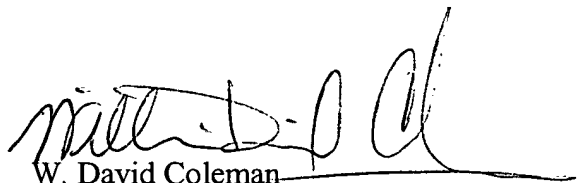
11. Claims 26, 27 and 30 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to W. David Coleman whose telephone number is 703-305-0004. The examiner can normally be reached on 9:00 AM-5:00 PM. After February 4, 2004 please call 571-272-1856.

13. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Olik Chaudhuri can be reached on 703-306-2794. The fax phone number for the organization where this application or proceeding is assigned is 703-308-7722.

14. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.


W. David Coleman
Primary Examiner
Art Unit 2823

WDC